



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/586,277	02/06/2008	Abram Evert Van Laar	3135-062115	4259

28289 7590 09/20/2010
THE WEBB LAW FIRM, P.C.
700 KOPPERS BUILDING
436 SEVENTH AVENUE
PITTSBURGH, PA 15219

EXAMINER

GOLIGHTLY, ERIC WAYNE

ART UNIT	PAPER NUMBER
----------	--------------

1714

MAIL DATE	DELIVERY MODE
-----------	---------------

09/20/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/586,277	Applicant(s) VAN LAAR, ABRAM EVERT	
	Examiner Eric Golightly	Art Unit 1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18-34 is/are pending in the application.
- 4a) Of the above claim(s) 31-34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>12 March 2008</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of claims 18-30 (Invention I) in the reply filed on 7/12/2010 is acknowledged. The traversal is on the ground(s) that examination of all inventions and all claims would not pose an undue burden since, it is alleged, the subject matter of all inventions and claims is interrelated and overlaps. This is not found persuasive since this is a 371 case, wherein the relevant issue is whether the inventions have unity, not whether they pose an undue burden. Claims 31-34 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim.

The requirement is still deemed proper and is therefore made FINAL.

2. While not germane to the issue of restriction here, it is noted that applicant's allegation that joinder of these distinct inventions would not present an undue burden relies on the unsupported assumption that the search and the examination of all inventions would be coextensive. While there may be some overlap in the searches of the inventions, there is not reason to believe that the searches would be identical.

3. Claims 18-34 are pending. Claims 31-34 are withdrawn. Claims 1-17 are cancelled.

Priority

4. The foreign priority claim filed on 6/1/2008 was not entered because the foreign priority claim was not filed during the time period set forth in 37 CFR 1.55(a)(1). For original applications filed under 35 U.S.C. 111(a) (other than a design application) on or after November 29, 2000, the time period is during the pendency of the application and within the later of four months from the actual filing date of the application or sixteen months from the filing date of the prior foreign application. For applications that have entered national stage from an international application filed on or after November 29, 2000, after compliance with 35 U.S.C. 371, the claim for priority must be made during the pendency of the application and within the time limit set forth in the PCT and the Regulations under the PCT. See 37 CFR 1.55(a)(1)(ii). If applicant desires priority under 35 U.S.C. 119(a)-(d), (f) or 365(a) based upon a prior foreign application, applicant must file a petition for an unintentionally delayed priority claim (37 CFR 1.55(c)). The petition must be accompanied by (1) the claim (i.e., the claim required by 35 U.S.C. 119(a)-(d) and (f) and 37 CFR 1.55) for priority to the prior foreign application, unless previously submitted; (2) a surcharge under 37 CFR 1.17(t); and (3) a statement that the entire delay between the date the claim was due under 37 CFR 1.55(a)(1) and the date the claim was filed was unintentional. The Director may require additional information where there is a question whether the delay was unintentional. The petition should be addressed to: Mail Stop Petition, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Specification

5. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

6. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

7. The abstract of the disclosure is objected to because it does not provide the organization and operation of the apparatus and includes the phrases "The invention relates to", "The invention also relates to" and "The invention further related to", which can be implied. Correction is required. See MPEP § 608.01(b).

Claim Objections

8. Claims 18, 19, 22, 23, 27 and 30 are objected to because of the following informalities:

Regarding claim 18, the phrase "heating means for heating" in line 16 is redundant.

Regarding claim 19, the "is" in line 2 should apparently be "are".

Regarding claim 22, the phrase "suction means ... for suctioning" in lines 2 and 3 is redundant.

Regarding claim 23, the phrase "brushing means ... for brushing" in lines 2 and 3 is redundant.

Regarding claim 27, the phrase "regulating means for regulating" in line 2 is redundant.

Regarding claim 30, the phrase "guide means for guiding" in line 2 is redundant.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

Art Unit: 1714

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 18-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 18, the phrase "comprising a mobile support structure for: at least one supply container ... a plurality of spray units ... and at least one pump ..." in lines 2-11 renders the claim indefinite because the container, spray units and pump are not positively claimed and it is not clear if they are part of the claimed structure. It appears that the intended meaning may be that they are not part of the claimed structure, and this meaning will be used for purposes of examination.

Regarding claim 18, the phrase "part-surface" in line 6 renders the claim indefinite because it is not clear what this means. It appears that the intended meaning may be "part of the surface" and this meaning will be used for purposes of examination.

Claim 21 recites the limitation "the direction of displacement" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Regarding claim 26, the phrase "brush means are ... shielded by a shielding element" in lines 1 and 2 renders the claim indefinite because the shielding element is not positively claimed and it is not clear if it is part of the claimed structure. It appears that the intended meaning may be that it is not part of the claimed structure, and this meaning will be used for purposes of examination.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

13. With regard to applicant's "means for bringing the cleaning agent under pressure" and "means for heating the cleaning agent" of claim 18, "means ... for suctioning up cleaning agent" of claim 22, "means ... for brushing the surface" of claim 23, "means for regulating the temperature, pressure and/or the quantity of cleaning agent" of claim 27 and "means for guiding the support structure" of claim 30, the language appears to be an attempt to invoke 35 USC 112, 6th paragraph interpretation of the claims. A claim limitation will be interpreted to invoke 35 U.S.C. 112, sixth paragraph, if it meets the following 3-prong analysis:

- (A) the claim limitations must use the phrase "means for" or "step for";

Art Unit: 1714

(B) the “means for” or “step for” must be modified by functional language;
and

(C) the phrase “means for” or “step for” must not be modified by sufficient
structure, material or acts for achieving the specified function.

In the instant case, applicant appears to have met the limitations set forth in MPEP § 2181, and examiner has turned to the specification for clarification.

In the specification, applicant does not specifically define the “means for bringing the cleaning agent under pressure”. The specification discloses a pump which is useful for feeding cleaning agent under pressure (claim 18). Accordingly, the examiner is interpreting the “means for bringing the cleaning agent under pressure” to encompass a pump which is useful for feeding cleaning agent under pressure and its equivalents.

In the specification, applicant does not specifically define the “means for heating the cleaning agent” nor are there embodiment examples. The specification discloses heating the agent (page 6, lines 33-35). Accordingly, the examiner is interpreting the “means for heating the cleaning agent” to encompass an element which is capable of being used to heat an agent and its equivalents.

In the specification, applicant does not specifically define the “means ... for suctioning up cleaning agent”. In an embodiment, the specification discloses a “means ... for suctioning up cleaning agent” comprises a nozzle (page 5, line 10). Accordingly, the examiner is interpreting the “means ... for suctioning up cleaning agent” to encompass a nozzle and its equivalents.

Art Unit: 1714

In the specification, applicant does not specifically define the “means ... for brushing the surface”. In an embodiment, the specification discloses a “means ... for brushing the surface” comprises rotatable annular brushes (page 5, line 20). In another embodiment, the specification discloses a “means ... for brushing the surface” comprises rotatable brush rollers (page 5, line 22). Accordingly, the examiner is interpreting the “means ... for brushing the surface” to encompass a rotatable brush and its equivalents.

In the specification, applicant does not specifically define the “means for regulating the temperature, pressure and/or the quantity of cleaning agent” nor are there embodiment examples. The specification discloses regulating the temperature, pressure and/or the quantity of cleaning agent (page 6, lines 1 and 2). Accordingly, the examiner is interpreting the “means for regulating the temperature, pressure and/or the quantity of cleaning agent” to encompass an element which is capable of being used to regulate the temperature, pressure and/or the quantity of cleaning agent and its equivalents.

In the specification, applicant does not specifically define the “means for guiding the support structure”. In an embodiment, the specification discloses a “means for guiding the support structure” comprises wheels (page 6, line 26). Accordingly, the examiner is interpreting the “means for guiding the support structure” to encompass a wheel and its equivalents.

Equivalent structures may include those that perform the function specified in the claim, structures that are not excluded by any specific definition provided in the

Art Unit: 1714

specification for an equivalent, or is a structural equivalent of the corresponding element disclosed in the specification. See MPEP 2183.

14. Claims 18-23 and 26-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 0020693 to Jacquinet (hereinafter "Jacquinet") in view of DE 10327413 to Schulte et al (hereinafter "Schulte").

Regarding claim 18, Jacquinet teaches an apparatus which is fully capable of being used for cleaning surfaces fouled with chewing gum (abstract) and discloses a mobile support structure (Fig. 1, ref. 10 and page 9, paragraph beginning "In Figure 1"), pressure-generating means (Fig. 1, ref. 13 and page 9, paragraph beginning "In Figure 1"),

Jacquinet discloses that the pressure-generation means is fully capable of pressuring a cleaning agent over 750 bar (claim 2), but is silent regarding it being capable of being used such that the pressure of the cleaning agent sprayed on a surface lies between 300 and 750 bar. Further, Jacquinet is silent regarding the heating means. Schulte teaches a device for cleaning surfaces (abstract) including heating means (Fig. 1, ref. 5 and 6 and EPO machine translation at claim 12) which disclosed as advantageously useful for heating a cleaning agent for the effective removal of gum (EPO machine translation at paragraph [0041]) and means for adjusting the pressure (EPO machine translation at claim 14). Schulte discloses the pressure adjustment means as fully capable of being used wherein cleaning agent is brought under pressure such that the cleaning agent is sprayed on a surface for cleaning at 300 bar (EPO

Art Unit: 1714

machine translation at paragraph [0041]) and discloses the heating means as fully capable of being used to heat a cleaning agent to 150 degrees Celsius (EPO machine translation at paragraph [0041]). It would have been obvious to one of ordinary skill in the art at the time of the invention to include heating means and means for adjusting the pressure as per the device of the Schulte teaching in the apparatus as per the Jacquinet teaching in order to enhance process control and allow for a broader range of cleaning operations with a broader range of temperatures and pressures. Jacquinet and Schulte are silent regarding the particular structure of the means for adjusting the pressure.

Pressure regulators, or means for adjusting pressure, are known in the art (see, e.g. US 6,070,808 to Kildow, which teaches a mobile spraying and cleaning apparatus (abstract) and discloses a pressure regulator (Fig. 2, ref. 40 and col. 4, lines 31 and 32) which is disclosed as advantageously enhancing the control of cleaning agent flow (col. 4, lines 36-41), and it would have been obvious to one of ordinary skill in the art at the time of the invention to include a pressure regulator as per the apparatus of the Kildow teaching to yield predictable results. MPEP 2143(A). The mobile support structure of the device as per the Jacquinet/Schulte teachings is fully capable of being used for a one supply container, a plurality of spray units and a pump as recited in claim (Jacquinet at Fig. 1, ref. 10, incl. ref 10 and 13, Fig. 3, ref. 25A-D, 26A-D, 27 and 28, page 9, paragraph beginning "In Figure 1" and page 10, first paragraph).

Regarding claim 19, the apparatus as per the Jacquinet/Schulte teachings is fully capable of being used wherein some spray units are adapted to spray the surface in a substantially circular pattern (see Jacquinet at Fig. 3, ref. 25A-D, 26A-D, 27 and 28 and

Art Unit: 1714

page 10, first paragraph). It is noted that the spray units are not positively claimed and are not interpreted as part of the claimed structure.

Regarding claim 20, the apparatus as per the Jacquinet/Schulte teachings is fully capable of being used wherein the spray units are connected rotatably to the support structure (see Jacquinet at Fig. 3, ref. 25A-D, 26A-D, 27 and 28 and page 10, first paragraph). It is noted that the spray units are not positively claimed and are not interpreted as part of the claimed structure.

Regarding claim 21, Jacquinet discloses an apparatus including two nozzle sets (Jacquinet at Fig. 3, ref. 27 and 28 and page 10, first paragraph), each including four nozzle units (Jacquinet at Fig. 3, ref. 25A-D and 26A-D and page 10, first paragraph) which are fully capable of being positioned one behind the other as seen in a direction of displacement of the support structure (Jacquinet at Figs. 10-12 and page 11, second to last paragraph to page 12, first paragraph). Jacquinet is silent regarding the nozzles being capable of spraying. Schulte discloses using nozzles which are spray nozzles (Schulte EPO machine translation at paragraph [0024]). It would have been obvious to use nozzles which are spray nozzles as per the apparatus of the Schulte teaching as the nozzles in the apparatus of the Jacquinet teaching to yield predictable results.

MPEP 2143.

Regarding claim 22, Jacquinet and Schulte disclose an apparatus including a suction means (Jacquinet at page 6, paragraph beginning "Other optional equipment ... includes: A conventional dry aspirator" and Schulte EPO machine translation at

Art Unit: 1714

paragraph [0020]) connected to the support structure, which is fully capable of being used for suctioning up cleaning agent supplied to the surface.

Regarding claim 23, Jacquinet is silent regarding brushing means. Schulte discloses brushing means (Fig. 1, ref. 7 and 8 and EPO machine translation at paragraph [0040]). The skilled artisan would have found it obvious to connect a brushing means of apparatus of the Schulte teaching to the support structure of the apparatus of the Jacquinet to yield predictable results in order to enhance cleaning. MPEP 2141(A) and MPEP 2144.04(V)(B).

Regarding claim 26, Jacquinet and Schulte disclose an apparatus wherein the spray units and brush means are fully capable of being shielded by a shielding element (Jacquinet at Fig. 2, ref. 22 and page 9, last paragraph and Schulte at Fig. 1, ref. 1 and EPO machine translation at paragraph [0039]). It is noted that the shielding element is not positively claimed and is not interpreted as part of the claimed structure.

Regarding claim 27, Jacquinet and Schulte disclose an apparatus including a means for regulating the pressure of cleaning agent (Jacquinet at Fig. 1, ref. 13 and page 9, paragraph beginning "In Figure 1"). It is noted that Jacquinet and Schulte further disclose a means for regulating the pressure of cleaning agent (Jacquinet at Fig. 1, ref. 13 and page 9, paragraph beginning "In Figure 1") and means for regulating the temperature of cleaning agent (Schulte at Fig. 1, ref. 5 and 6 and EPO machine translation at claim 12).

Regarding claim 28, Jacquinet and Schulte disclose an apparatus wherein the relative orientation of the spray units and the support structure can be changed (Jacquinet at Fig. 1, ref. 10, Fig. 3, ref. 27 and 28 and Figs. 10-12).

Regarding claim 29, Jacquinet and Schulte disclose an apparatus wherein the support structure is formed by a vehicle (Jacquinet at Fig. 1, ref. 10 and page 9, paragraph beginning "In Figure 1").

Regarding claim 30, Jacquinet and Schulte disclose an apparatus including guide means (Jacquinet at Fig. 1, ref. 16 and page 9, paragraph beginning "In Figure 1").

15. Claims 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jacquinet (WO 0020693) in view of Schulte (DE 10327413) and in further view of EP 381904 to Ducreux et al. (hereinafter "Ducreux").

Jacquinet and Schulte disclose brushing means wherein the brush rotates perpendicular to the surface (Schulte Fig. 1, ref. 7 and 8 and EPO machine translation at paragraph [0040]) rather than parallel to the surface, i.e. a roller brush. Ducreux teaches a cleaning device for surfaces (abstract) and discloses brushing means that include a roller brush (Fig. 5, ref. 30, incl. ref. 31' and paragraphs beginning "Drums 31 of brushes 30"). Ducreux discloses a brush roller positioned between a front spray unit and a rear spray unite (Fig. 1, ref. 38 and 39, Fig. 2, ref. 38 and 31', paragraphs beginning "Drums 31 of brushes 30" and claim 1). The skilled artisan would have found it obvious to substitute a brush roller of the device as per the Ducreux teaching for the brush of the apparatus as per the Jacquinet/Schulte teachings to obtain predictable

Art Unit: 1714

results. MPEP 2143(B). Assuming, arguendo, that the applied art did not disclose a brush between spray units, it is noted that the skilled artisan would have found it obvious to try since there are only four options: a) all brushes in front of spray units, b) all brushes behind spray units, c) all brushes located either in front of or behind spray units and d) a brush between spray units.

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The EPO translation of Schulte (DE10327413) discloses a device for cleaning surfaces. The EPO translation of Ducreux (EP 381904) teaches a cleaning device for surfaces. US 2002/0124334 to Worwag teaches a cleaning device for floor surfaces.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Golightly whose telephone number is (571) 270-3715. The examiner can normally be reached on Monday to Thursday, 7:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Kornakov can be reached on (571) 272-1303. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1714

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/E. G./

Examiner, Art Unit 1714

/Michael Kornakov/

Supervisory Patent Examiner, Art Unit 1714